7. MARSH HARRIER *CIRCUS AERUGINOSUS* PRE-ROOSTING ON TREES IN KEOLADEO NATIONAL PARK, BHARATPUR, RAJASTHAN

The Keoladeo National Park (27° 7.6' to 27° 12.2' N, 77° 29.5' to 77° 33.2' E) in Rajasthan is a known roost of Marsh Harriers (Samant *et al.* 1995). During the present study (1997-99) more than 150 Marsh Harriers were recorded roosting in the grasslands of the Park.

The harriers roost communally on the ground outside the breeding season (Newton 1979). The Marsh Harriers were observed roosting communally in the southeast corner of the Park on the ground among tall grasses in Block-G (locally called Koladehar). They started arriving at the roost area about an hour before sunset and pre-roosted on trees lining the roost area. This behaviour is unusual, as they have never been recorded pre-roosting on trees elsewhere. They generally pre-roost on bare ground before settling in the actual roosting site (Clarke 1996, Donald 1905).

By pre-roosting in the open, harriers probably attract their roosting allies to a particular roost to increase the roost size, as has been seen in other species (Zahavi 1971). Roosting communally in big flocks has its own advantages (Ward and Zahavi 1973). Pre-roosting on tree-tops by Marsh Harriers in the Park may be for the same reason, as the grass here is very tall (about 2.5 m). Pre-roosting on the ground would not be beneficial, as they would not be visible to their conspecifics. Another possible reason for pre-roosting on trees could be to

avoid the mammalian predators lurking around, such as the Jungle Cat *Felis chaus*, Jackal *Canis aureus*, and Striped Hyena *Hyaena hyaena*, that are frequently sighted in the grassland.

During the winters of 1997-98 and 1998-99, 74% of the pre-roosting (n = 3753) was recorded on trees.

ACKNOWLEDGEMENTS

I thank the Rajasthan Forest Department for permission to work in the Park, Ms. Shruti Sharma, Director, Keoladeo National Park for kindly extending facilities and the US Fish and Wildlife Service for funding the project, especially Mr. David Ferguson for help and encouragement. I thank Mr. J.C. Daniel, Honorary Secretary, BNHS, Dr. A.R. Rahmani, Director, BNHS and Dr. Vibhu Prakash for encouragement and critical comments on the manuscript.

November 7, 2001

Bombay Natural History Society,
Hornbill House, S.B. Singh Road,
Mumbai 400 023, Maharashtra, India.
Present Address: Sarafa Bazaar,
Rekha Naanga Street,
Bharatpur 321 001, Rajasthan, India.
Email: vermaasok@rediffmail.com

REFERENCES

CLARKE, R. (1996): Preliminary observations on the importance of a large communal roost of wintering harriers in Gujarat (N.W. India) and comparison with a roost in Senegal (W. Africa). *J. Bombay nat. Hist. Soc. 93*: 44-50.

Donald, C.H. (1905): A congregation of harriers. *J. Bombay nat. Hist. Soc.* 16: 504-505.

Newton, I. (1979): Population ecology of raptors. T. & A.D. Poyser Ltd., England.

Samant, J.S., V. Prakash & Rishad Naoron (1995): Ecology and Behaviour of Resident Raptors with special reference to Endangered Species. Final Report 1990-93. Bombay Natural History Society, Bombay. Pp. 92.

WARD, P. & A. Zahavi (1973): The importance of certain assemblages as "information centers" for food finding. *Ibis* 115: 517-534.

Zahavi, A. (1971): The function of pre-roost gatherings and communal roosts. *Ibis* 113: 106-109.

8. BLUE-WINGED PARAKEET *PSITTACULA COLUMBOIDES*, FAMILY PSITTACIDAE, FEEDING ON *LORANTHUS* LEAVES

On March 5, 2001, I was birding near Doodha Sagar in Mahaveer Wildlife Sanctuary, Goa when I saw a Blue-winged Parakeet (*Psittacula columboides*) and Indian Hanging-parrot (*Loriculus vernalis*) on an Arjuna tree (*Terminalia arjuna*).

On close observation, I found that both the species were feeding on the green leaves of a parasitic plant on the Arjuna tree. The half chewed leaves were collected and later identified as *Loranthus longiflorus*. On March

6, 2001, the same activity was observed in Castle Rock village on the Goa - Karnataka border, Joyda taluka, Uttar Kannada district, Karnataka.

August 20, 2001

SHARAD APTE 1766, Ushahakal, Ganesh Nagar, Dr. Ambedkar Road, Sangli 416 416, Maharashtra, India.